



# MANSCEN Directorate Combat Development

**Bridging Information Brief** 

To

University of Missouri - Rolla





## Assault Bridging

- Assault Bridging--Tactical bridging which must be emplaced to cross a combined arms force engaged in combat, usually within range of enemy direct fires. Characteristics of such bridging include:
  - Mobile
  - Survivable
  - Rapidly Installed with minimal personnel
  - Strategically Deployable





## Support Bridging

- Support Bridging -- Tactical bridging which must be emplaced on main supply routes (MSRs) to cross military traffic to the rear of the area of direct combat. Characteristics of these bridges are:
  - Rapidly Installed
  - Strategically Deployable
  - Versatile





- LOCB -- Civil Engineering work to repair or replace bridging that supports the theater of operations. Bailey Bridge is the system of choice, alternative source is the Mabey-Johnson or other commercially available systems. Characteristics are:
  - Adaptive design
  - Minimum on-site civil engineering
  - Manpower intense





## Tech Base Challenges

- Retrieve assault bridges under fire
- Determine remaining useful life of bridges.
- LOCB Replacement for Bailey
- Access/Egress
- Signature reduction of bridges

- Increasing capacity and durability while decreasing weight and cube.
- Anchorage
- Route marking through bridgehead
- Soil Stabilization





### Tech Base Initiatives

 Some tech base solutions can be viewed as evolutionary (such as the improvements to the ribbon bridge) while others are more revolutionary in nature (advanced composite materials incorporated into a ballistically robust structure). The dilemma is to solve an increasing series of issues with declining resources. This becomes more critical as the weights of vehicles to be crossed continues to increase as does the age of the bridges.





## Future Bridging Efforts

- Rapidly Emplaced Bridge System (REBS)
- Line Of Communications Bridge (LOCB)
- Float Bridge System (FBS)
  - Float Bridge
  - Bridge Propulsion System
  - Bridge Anchorage
  - Access/Egress

ESSAYONS ——— "Let US Try" ———



#### Point of Contact within DOD

- http://contracting.tacom.army.mil/opportunity.htm
  - Draft Solicitations
  - Market Survey & Sources
  - Broad Agency & Research Announcements





#### Point of Contact for Publications

- http://wood.army.mil
  - Other Useful Links
    - TRADOC
      - Training & Doctrine Digital Library